



UNITED STATES DEPARTMENT OF  
COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND  
COMMISSIONER OF PATENTS AND  
TRADEMARKS

Washington, D.C. 20231

MEMORANDUM

DATE : August 10, 1995

TO : Board of Interference

FROM : Johann Richter, SPE 1201

SUBJECT: Initial Interference Memo re Appl.  
SN 08/162,984

Count 1 is directed to a Markush claim consisting of final products. It is therefore patentably distinct from count 3 which is directed to intermediate compounds used in preparing the final products.

Count 2, which is drawn to a species, is patentably distinct from count 1 because although embraced by the broad genus of count 1, applicants have provided data which demonstrates unexpected results, and hence, unobviousness over the broad genus of count 1. See the Declar

4-27-95.

Exhibit 4  
CHEN, ET AL.  
Interference No. 103,675



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Count 1 is directed to a Markush claim consisting of final products. It is therefore patentably distinct from count 3 which is directed to intermediate compounds used in preparing the final products.

Count 2, which is drawn to a species, is patentably distinct from count 1 because although embraced by the broad genus of count 1, applicants have provided data which demonstrates unexpected results, and hence, unobviousness over the broad genus of count 1. See the Declaration by Dr. Lavelle filed

4-27-95.

|  
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Page 2

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johann Richter whose telephone number is (703) 308-4532.

RICHTER:bah  
August 10, 1995

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## INTERFERENCE—INITIAL MEMORANDUM

**EXAMINERS INSTRUCTIONS**—This form need not be typewritten. Complete the items below and forward to the Group Clerk with all files including those benefit of which has been accorded. The parties need not be listed in any specific order. Use a separate form for each count.

See MPEP 2309.02!

**BOARD OF PATENT APPEALS AND INTERFERENCES.** An Interference is found to exist between the following cases:

This is count 2 of 3 count(s).

<input checked="" type="checkbox"/> NAME <b>BOUCHARD et al.</b>	SERIAL NO <b>08/162984</b>	FILING DATE <b>Dec. 8, 1993</b>	PATENT NO. IF ANY
The claims of this party which correspond to this count are  <b>(142) (allowable)</b>		The claims of this party which do not correspond to this count are  <b>5, 13, 24, 54, 62, 73, 103-139 (allowable) 140, 141 (allowable)</b>	
* Accorded benefit of COUNTRY  <b>France</b>	SERIAL NO <b>92 14913</b>	FILING DATE <b>Dec. 9, 1992</b>	PATENT NO. IF ANY
<input checked="" type="checkbox"/> NAME <b>CHEN et al.</b>	SERIAL NO <b>08/029819</b>	FILING DATE <b>Mar. 11, 1993</b>	PATENT NO. IF ANY <b>5, 2545586</b>
The claims of this party which correspond to this count are  <b>(7), 8, 9</b>		The claims of this party which do not correspond to this count are  <b>1-6, 10, 11</b>	
* Accorded benefit of COUNTRY	SERIAL NO	FILING DATE	PATENT NO. IF ANY
<input checked="" type="checkbox"/> NAME	SERIAL NO	FILING DATE	PATENT NO. IF ANY
The claims of this party which correspond to this count are		The claims of this party which do not correspond to this count are	
* Accorded benefit of COUNTRY	SERIAL NO	FILING DATE	PATENT NO. IF ANY
If a claim of any party is exactly the same as this count, it should be circled above. If not, type the count in this space (attach additional sheet if necessary).			

See pg 13 of paper #24

The serial number and filing date of each application the benefit of which is intended to be accorded must be listed. It is not sufficient to merely list the earliest application if there are intervening applications necessary for continuity.

DATE

PRIMARY EXAMINER

8-8-95

**JENN RICHTER**

TELEPHONE NO

308-4532

ART. UNIT

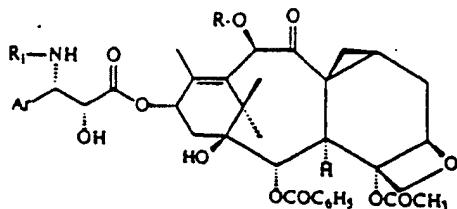
1261

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Proposed generic count and claims designated as corresponding thereto

Count 1

A taxoid of the formula:



in which

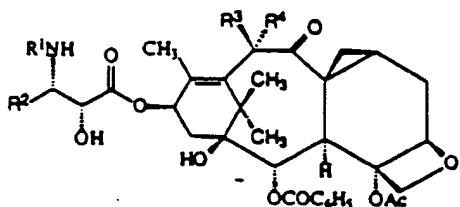
R represents hydrogen or acetyl,

R<sub>1</sub> represents benzoyl or R<sub>2</sub>-O-CO- in which R<sub>2</sub> represents t-butyl, and

Ar represents phenyl or α- or β-naphthyl, said phenyl or naphthyl being unsubstituted or substituted by C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, halogen, or CF<sub>3</sub>, or Ar represents 2- or 3-thienyl or 2- or 3-furyl, said thienyl or furyl being unsubstituted or substituted by halogen,

OR

A compound of the formula



in which

R<sup>1</sup> is -COR<sup>2</sup> in which R<sup>2</sup> is t-butyloxy, C<sub>1-4</sub> alkyl, C<sub>2-4</sub> alkenyl, C<sub>2-4</sub> alkynyl, C<sub>3-6</sub> cycloalkyl, or phenyl, optionally substituted with one to three same or different C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, halogen or -CF<sub>3</sub> groups;

R<sup>2</sup> is C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkenyl, C<sub>2-4</sub> alkynyl, C<sub>3-6</sub> cycloalkyl, or a radical of the formula -W-R<sup>4</sup> in which W is a bond, C<sub>2-4</sub> alkenediyl, or -(CH<sub>2</sub>)<sub>t</sub>-, in which t is one to six; and R<sup>4</sup> is naphthyl, furyl, thienyl or phenyl, and furthermore R<sup>4</sup> can be optionally substituted with one to three same or different C<sub>1-4</sub> alkyl, C<sub>1-4</sub> alkoxy, halogen or -CF<sub>3</sub> groups; and

R<sup>3</sup> is OCOR, -OCOOR, H, or OH; R<sup>4</sup> is hydrogen; or R<sup>3</sup> and R<sup>4</sup> jointly form a carbonyl group; and R is C<sub>1-4</sub> alkyl.

10/20/95

10/20/95

FORM PTO-850  
REV. 3-86.U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

## INTERFERENCE—INITIAL MEMORANDUM

EXAMINERS INSTRUCTIONS—This form need not be typewritten. Complete the items below and forward to the Group Clerk with all files including those benefit of which has been accorded. The parties need not be listed in any specific order. Use a separate form for each count.

BOARD OF PATENT APPEALS AND INTERFERENCES: An interference is found to exist between the following cases:

This is count 1 of 3 count(s).

<input checked="" type="checkbox"/> NAME <b>BOUCHARD et al.</b>	SERIAL NO <b>08/162 984</b>	FILING DATE <b>Dec. 8, 1993</b>	PATENT NO. IF ANY
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The claims of this party which correspond to this count are

(140) (allowable)

The claims of this party which do not correspond to this count are

5, 13, 24, 54, 62, 73, 103-137 (all)  
141-142 (allowable)

* Accorded benefit of COUNTRY	SERIAL NO	FILING DATE	PATENT NO. IF ANY
<input checked="" type="checkbox"/> France	<input checked="" type="checkbox"/> 92 14813	<input checked="" type="checkbox"/> Dec. 9, 1992	

<input checked="" type="checkbox"/> NAME <b>CHEN et al.</b>	SERIAL NO <b>08/029 819</b>	FILING DATE <b>Mar. 11, 1993</b>	PATENT NO. IF ANY <b>5,254,580</b>
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The claims of this party which correspond to this count are

(1-6, 8, 9)

The claims of this party which do not correspond to this count are

7, 10, 11

* Accorded benefit of COUNTRY	SERIAL NO	FILING DATE	PATENT NO. IF ANY

3. NAME	SERIAL NO	FILING DATE	PATENT NO. IF ANY

The claims of this party which correspond to this count are

The claims of this party which do not correspond to this count are

* Accorded benefit of COUNTRY	SERIAL NO.	FILING DATE	PATENT NO. IF ANY

If a claim of any party is exactly the same as this count, it should be circled above. If not, type the count in this space (attach additional sheet if necessary)

See pg. 10 of paper #24

\* The serial number and filing date of each application the benefit of which is intended to be accorded must be listed. It is not sufficient merely to list the earliest application if there are intervening applications necessary for continuity.

DATE <b>8-8-95</b>	PRIMARY EXAMINER <b>JULIANA RICHTER</b>	TELEPHONE NO <b>301-4522</b>
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In sum, RPR claim 142 and BMS claim 7 define the same compound and thus define the same invention. The PTO has already issued BMS patent claim 7; RPR claim 142 must, therefore, be allowable. Species Count 2 links RPR claim 142 and BMS claim 7 by "OR" as follows:

Proposed species count and claims designated as corresponding thereto

Count 2

4 $\alpha$ -10 $\beta$ -diacetoxy-2 $\alpha$ -benzoyloxy-5 $\beta$ ,20-epoxy-18-hydroxy-7 $\beta$ ,8 $\beta$ -methylene-9-oxo-19-nor-11-taxen-13 $\alpha$ -yl(2R,3S)-3-tert-butoxycarbonylamino-2-hydroxy-3-phenylpropionate

OR

N-debenzoyl-N-t-butoxycarbonyl-7-deoxy-8-desmethyl-7,8-cyclopropataxol.

RPR claim 142 and BMS claims 7, 8 (to extent it depends on claim 7), and 9 (to the extent it depends from claim 7) should be designated in Form PTO-850 as corresponding to species Count 2.

3. RPR claim 141 is patentable and interfering with BMS claim 10

Claim 141 of the present application and claims 10 and 11 of the BMS patent define the same patentable invention directed to intermediate compounds. Claim 141 was rewritten from cancelled claim 101, and, as Exhibit E shows, claims the same subject matter as the cancelled claim. The RPR specification, moreover, fully supports claim 141, as shown in Table 4:

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Form PTO 850  
Rev. 3-86.U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

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**BOARD OF PATENT APPEALS AND INTERFERENCES:** An Interference is found to exist between the following cases:

This is count 3 of 3 count(s).

NAME	SERIAL NO	FILING DATE	PATENT NO. IF ANY
BOUCHARD et al.	08/162984	Dec. 8, 1993	

The claims of this party which correspond to this count are

(141) (allowable)

The claims of this party which do not correspond to this count are

5, 13, 24, 54, 62, 73, 105-139 (allowable)  
140, 142 (allowable) *(Not allowed)*

Accorded benefit of COUNTRY	SERIAL NO	FILING DATE	PATENT NO. IF ANY
France	92 14813	Dec. 9, 1992	

NAME	SERIAL NO.	FILING DATE	PATENT NO. IF ANY
CHEN et al.	08/029819	Mar. 11, 1993	5, 254, 586

The claims of this party which correspond to this count are

(10), 11

The claims of this party which do not correspond to this count are

1-9

Accorded benefit of COUNTRY	SERIAL NO	FILING DATE	PATENT NO. IF ANY

3. NAME	SERIAL NO	FILING DATE	PATENT NO. IF ANY

The claims of this party which correspond to this count are

The claims of this party which do not correspond to this count are

Accorded benefit of COUNTRY	SERIAL NO	FILING DATE	PATENT NO. IF ANY

If a claim of any party is exactly the same as this count, it should be circled above. If not, type the count in this space (attach additional sheet if necessary).

DEPARTMENT OF PATENT & TRADEMARKS  
APPEALS &  
INTERFERENCES

See pg. 13, 15 of paper # 24

Oct 12, 1995

The serial number and filing date of each application the benefit of which is intended to be accorded must be listed. It is not sufficient merely to list the earliest application if there are intervening applications necessary for continuity.

DATE	PRIMARY EXAMINER	TELEPHONE NO	ART UNIT
10/12/95	TOMAS A. RUMFELD	202-4577	126

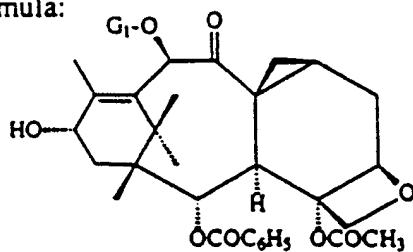
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Specifically, RPR claim 141 falls completely within the scope of Claim 10 of the BMS patent and defines the same invention. Because BMS patent claim 10 has issued, narrower RPR claim 141 must be allowable. Intermediate Count 3 links RPR claim 141 with BMS claim 10 as follows:

Proposed intermediate count and claims designated as corresponding thereto

Count 3

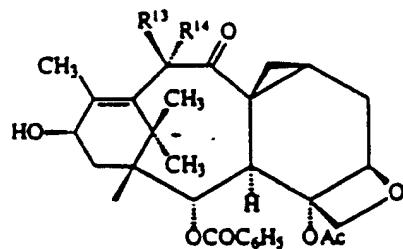
A taxoid of the formula:



in which G<sub>1</sub> represents hydrogen or acetyl.

OR

A compound of the formula:



in which R<sup>13</sup> is hydrogen, acetyloxy or hydroxy; R<sup>14</sup> is hydrogen; or R<sup>13</sup> and R<sup>14</sup> jointly form a carbonyl group.

RPR claim 141 and claims 10 and 11 from the BMS patent should be designated in Form PTO-850 as corresponding to intermediate Count 3.